

December 30, 1993

Docket No. 50-346

DISTRIBUTION

Docket File	GHill
NRC & Local PDRs	RBarrett
PD3-3 Reading	CGrimes
JRoe	ACRS(10)
JZwolinski	OPA
JHannon	OC/LFDCB
MRushbrook	Region RIII, DRP
JHopkins	
OGC-WF	
DHagan	

Mr. Louis F. Storz
 Vice President, Nuclear - Davis-Besse
 Centerior Service Company
 c/o Toledo Edison Company
 Davis-Besse Nuclear Power Station
 5501 North State Route 2
 Oak Harbor, Ohio 43449

Dear Mr. Storz:

SUBJECT: AMENDMENT NO. 183 TO FACILITY OPERATING LICENSE NO. NPF-3
(TAC NO. M87339)

The Commission has issued Amendment No. 183 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment revises the Technical Specifications in response to your application dated August 30, 1993.

This amendment adds a Technical Specification (TS) Action statement, which applies when both containment hydrogen dilution systems are inoperable, and revises the associated TS bases section.

A copy of the Safety Evaluation is also enclosed. Notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by Jon B. Hopkins

Jon B. Hopkins, Sr. Project Manager
 Project Directorate III-3
 Division of Reactor Projects III/IV/V
 Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 183 to License No. NPF-3
2. Safety Evaluation

cc w/enclosures:

See next page

LA/PD3-3 MRushbrook 11/17/93	PM/PD3-3 JHopkins/sw 11/17/93	D/PDR-3 JHannon 11/17/93	BC/S/SB RBarrett 11/17/93	BC/OTSB CGrimes 12/13/93	OGC C Marco 12/21/93
------------------------------------	-------------------------------------	--------------------------------	---------------------------------	--------------------------------	----------------------------

OFFICIAL RECORD

93-184

Change Made.
 JBH

DOCUMENT NAME: G:\DAVISBES\DB87339.AMD

060022

9401100190 931230
 PDR ADOCK 05000344
 PDR

NOT THE CENTER COPY

OP-1
 JBH
 11



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 30, 1993

Docket No. 50-346

Mr. Louis F. Storz
Vice President, Nuclear - Davis-Besse
Centerior Service Company
c/o Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449

Dear Mr. Storz:

SUBJECT: AMENDMENT NO. 183 TO FACILITY OPERATING LICENSE NO. NPF-3
(TAC NO. M87339)

The Commission has issued Amendment No. 183 to Facility Operating License No. NPF-3 for the Davis-Besse Nuclear Power Station, Unit No. 1. The amendment revises the Technical Specifications in response to your application dated August 30, 1993.

This amendment adds a Technical Specification (TS) Action statement, which applies when both containment hydrogen dilution systems are inoperable, and revises the associated TS bases section.

A copy of the Safety Evaluation is also enclosed. Notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Jon B. Hopkins".

Jon B. Hopkins, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 183 to License No. NPF-3
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Louis F. Storz
Toledo Edison Company

Davis-Besse Nuclear Power Station
Unit No. 1

cc:

Mary E. O'Reilly
Centerior Energy Corporation
300 Madison Avenue
Toledo, Ohio 43652

Robert E. Owen, Chief
Bureau of Radiological Health Services
Ohio Department of Health
Post Office Box 118
Columbus, Ohio 43266-0118

Mr. William T. O'Connor, Jr.
Manager - Regulatory Affairs
Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State - Route 2
Oak Harbor, Ohio 43449

Attorney General
Department of Attorney
General
30 East Broad Street
Columbus, Ohio 43215

Gerald Charnoff, Esq.
Shaw, Pittman, Potts
and Trowbridge
2300 N Street, N.W.
Washington, D.C. 20037

Mr. James W. Harris, Director
Division of Power Generation
Ohio Department of Industrial Regulations
P. O. Box 825
Columbus, Ohio 43216

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

Ohio Environmental Protection Agency
DERR--Compliance Unit
ATTN: Zack A. Clayton
P. O. Box 1049
Columbus, Ohio 43266-0149

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
1700 Rockville Pike, Suite 525
Rockville, MD 20852

President, Board of Ottawa
County Commissioners
Port Clinton, Ohio 43452

Resident Inspector
U. S. Nuclear Regulatory Commission
5503 N. State Route 2
Oak Harbor, Ohio 43449

State of Ohio
Public Utilities Commission
180 East Broad Street
Columbus, Ohio 43266-0573

Mr. Donald C. Shelton
Senior Vice President - Nuclear
Centerior Service Company
6200 Oak Tree Boulevard
Independence, Ohio 44101

Mr. James R. Williams
State Liaison to the NRC
Adjutant General's Department
Office of Emergency Management Agency
2825 West Granville Road
Columbus, Ohio 43235-2712

Mr. John K. Wood, Plant Manager
Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TOLEDO EDISON COMPANY

CENTERIOR SERVICE COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

DOCKET NO. 50-346

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 183
License No. NPF-3

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Toledo Edison Company, Centerior Service Company, and the Cleveland Electric Illuminating Company (the licensees) dated August 30, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-3 is hereby amended to read as follows:

(a) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 183, are hereby incorporated in the license. The Toledo Edison Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented not later than 90 days after issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Jon B. Hopkins, Sr. Project Manager
Project Directorate III-3
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of issuance: December 30, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 183

FACILITY OPERATING LICENSE NO. NPF-3

DOCKET NO. 50-346

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Remove

3/4 6-25

B 3/4 6-4

Insert

3/4 6-25

B 3/4 6-4

CONTAINMENT SYSTEMS

CONTAINMENT HYDROGEN DILUTION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.4.3 Two independent containment hydrogen dilution systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

- a. With one containment hydrogen dilution system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.
- b. With both containment hydrogen dilution systems inoperable, restore at least one dilution system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.3 Each containment hydrogen dilution system shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST basis by:

- a. Verifying that the system can be started on operator action in the control room, and
- b. Verifying that the system operates for at least 15 minutes and the blower develops a discharge pressure of 15 psig.

CONTAINMENT SYSTEMS

BASES

3/4.6.4 COMBUSTIBLE GAS CONTROL

The OPERABILITY of the Hydrogen Analyzers, Containment Hydrogen Dilution System, and Hydrogen Purge System ensures that this equipment will be available to maintain the maximum hydrogen concentration within the containment vessel at or below three volume percent following a LOCA.

The two redundant Hydrogen Analyzers determine the content of hydrogen within the containment vessel. The Hydrogen Analyzers, although they have their OPERABILITY requirements in this Specification, are considered part of the post-accident monitoring instrumentation of Specification 3/4.3.3.6, Post-Accident Monitoring Instrumentation.

The Containment Hydrogen Dilution (CHD) System consists of two full capacity, redundant, rotary, positive displacement type blowers to supply air to the containment. The CHD System controls the hydrogen concentration by the addition of air to the containment vessel, resulting in a pressurization of the containment and suppression of the hydrogen volume fraction.

The Containment Hydrogen Purge System Filter Unit functions in conjunction with the CHD System and is designed to release air from the containment atmosphere through a HEPA filter and charcoal filter prior to discharge to the station vent.

As a backup to the CHD System and the Containment Hydrogen Purge System, the capability to install an external hydrogen recombination system has been provided.

3/4.6.5 SHIELD BUILDING

3/4.6.5.1 EMERGENCY VENTILATION SYSTEM

The OPERABILITY of the emergency ventilation systems ensures that containment vessel leakage occurring during LOCA conditions into the annulus will be filtered through the HEPA filters and charcoal absorber trains prior to discharge to the atmosphere. This requirement is necessary to meet the assumptions used in the safety analyses and limit the site boundary radiation doses to within the limits of 10 CFR 100 during LOCA conditions.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 183 TO FACILITY OPERATING LICENSE NO. NPF-3
TOLEDO EDISON COMPANY
CENTERIOR SERVICE COMPANY
AND
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1
DOCKET NO. 50-346

1.0 INTRODUCTION

By letter dated August 30, 1993, Toledo Edison Company requested a revision to the Technical Specifications for the Davis-Besse Nuclear Power Station (DBNPS). The proposed amendment adds an Action statement to Technical Specification (TS) 3/4.6.3, "Containment Hydrogen Dilution System," which would apply when both containment hydrogen dilution (CHD) systems are inoperable. The change would allow 72 hours to return one of the two inoperable CHD systems to operable status or be in at least Hot Standby within the next six hours. Also, the associated TS bases Section 3/4.6.4, "Combustible Gas Control," would be revised to clarify the discussion of the CHD and containment hydrogen purge systems, and to add mention of the capability to install an external hydrogen recombination system.

2.0 EVALUATION

The combustible gas control system is designed to control the concentration of hydrogen which may be released within the containment vessel atmosphere following a loss-of-coolant accident (LOCA). The system is composed of the CHD systems and the hydrogen purge (HP) system. As a backup to the CHD and HP systems, the capability to install an external hydrogen recombination system has been provided at DBNPS.

The lower flammability limit for hydrogen that is assumed for a post-LOCA environment is four percent by volume. The combustible gas control systems are designed to be operated as necessary to maintain hydrogen concentration in the containment vessel at or below three percent by volume following a LOCA.

Hydrogen concentrations of three percent and four percent are calculated to be reached in approximately 17 days and 28 days following a postulated design basis LOCA at DBNPS. This amount of time is ample for either returning one CHD system to service or for installing the external hydrogen recombination system in the event that a LOCA occurs when both CHD systems are inoperable. Therefore, the proposed 72-hour action statement for both CHD systems inoperable is acceptable. The change to the associated bases is just clarifying in nature and is acceptable.

Based on the above, the NRC staff finds that the proposed amendment to add an action statement for two CHD systems inoperable is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Ohio State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (58 FR 52995). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Hopkins

Date: December 30, 1993